

Parameter	Value	Unit	Source
Age	10.5	yr	1
Weight	10.5	kg	1
Height	1.5	m	1
Sex	Male		1
Marital status	Married		1
Education	High school		1
Occupation	Student		1
Religion	Islam		1
Smoking status	Non-smoker		1
Alcohol consumption	No		1
Family size	4		1
Household income	1000	USD	1
Health insurance	Yes		1
Chronic diseases	No		1
Medication use	No		1
Stress level	Low		1
Physical activity	Low		1
Dietary habits	Unhealthy		1
Sleep patterns	Irregular		1
Genetic factors	No		1
Environmental factors	No		1
Psychological factors	No		1
Social factors	No		1
Healthcare access	Yes		1
Healthcare quality	Good		1
Healthcare cost	Low		1
Healthcare satisfaction	High		1
Healthcare utilization	High		1
Healthcare outcomes	Good		1
Healthcare equity	Yes		1
Healthcare transparency	Yes		1
Healthcare accountability	Yes		1
Healthcare innovation	Yes		1
Healthcare sustainability	Yes		1
Healthcare resilience	Yes		1
Healthcare adaptability	Yes		1
Healthcare inclusivity	Yes		1
Healthcare accessibility	Yes		1
Healthcare affordability	Yes		1
Healthcare quality of care	High		1
Healthcare patient safety	High		1
Healthcare clinical outcomes	High		1
Healthcare patient satisfaction	High		1
Healthcare patient engagement	High		1
Healthcare patient empowerment	High		1
Healthcare patient education	High		1
Healthcare patient participation	High		1
Healthcare patient advocacy	High		1
Healthcare patient support	High		1
Healthcare patient care	High		1
Healthcare patient experience	High		1
Healthcare patient journey	High		1
Healthcare patient outcomes	High		1
Healthcare patient quality	High		1
Healthcare patient safety	High		1
Healthcare patient clinical outcomes	High		1
Healthcare patient satisfaction	High		1
Healthcare patient engagement	High		1
Healthcare patient empowerment	High		1
Healthcare patient education	High		1
Healthcare patient participation	High		1
Healthcare patient advocacy	High		1
Healthcare patient support	High		1
Healthcare patient care	High		1
Healthcare patient experience	High		1
Healthcare patient journey	High		1
Healthcare patient outcomes	High		1
Healthcare patient quality	High		1
Healthcare patient safety	High		1
Healthcare patient clinical outcomes	High		1
Healthcare patient satisfaction	High		1
Healthcare patient engagement	High		1
Healthcare patient empowerment	High		1
Healthcare patient education	High		1
Healthcare patient participation	High		1
Healthcare patient advocacy	High		1
Healthcare patient support	High		1
Healthcare patient care	High		1
Healthcare patient experience	High		1
Healthcare patient journey	High		1
Healthcare patient outcomes	High		1
Healthcare patient quality	High		1
Healthcare patient safety	High		1
Healthcare patient clinical outcomes	High		1
Healthcare patient satisfaction	High		1
Healthcare patient engagement	High		1
Healthcare patient empowerment	High		1
Healthcare patient education	High		1
Healthcare patient participation	High		1
Healthcare patient advocacy	High		1
Healthcare patient support	High		1
Healthcare patient care	High		1
Healthcare patient experience	High		1
Healthcare patient journey	High		1
Healthcare patient outcomes	High		1
Healthcare patient quality	High		1
Healthcare patient safety	High		1
Healthcare patient clinical outcomes	High		1
Healthcare patient satisfaction	High		1
Healthcare patient engagement	High		1
Healthcare patient empowerment	High		1
Healthcare patient education	High		1
Healthcare patient participation	High		1
Healthcare patient advocacy	High		1
Healthcare patient support	High		1
Healthcare patient care	High		1
Healthcare patient experience	High		1
Healthcare patient journey	High		1
Healthcare patient outcomes	High		1
Healthcare patient quality	High		1
Healthcare patient safety	High		1
Healthcare patient clinical outcomes	High		1
Healthcare patient satisfaction	High		1
Healthcare patient engagement			

PHIL TRIGIANI

Filed: March 12, 2001 Previous Examiner: J. Jacyna

* * * * *

PRELIMINARY AMENDMENT

Sir:

IN THE SPECIFICATION:

On page 1, after the Title, delete:

"This application is a continuation-in-part of U.S. Patent Application 09/535,368, filed March 24, 2000, now pending, the entire contents of which are hereby incorporated by reference and relied upon."

and replace with:

--This application is a continuation of U.S. Patent Application 09/557,831, filed April 26, 2000, now pending, which is a continuation-in-part of U.S. Patent Application 09/535,368, filed March 24, 2000, now U.S. Patent 6,186,197, the entire contents of which are hereby incorporated by reference and relied upon.--

IN THE CLAIMS:

Kindly cancel claims 1-12.

Kindly add new claims 13-17, as follows:

--13. A canister for charging a closed, pressurized air conditioning or refrigeration system with a fluid, comprising:

a) a closed, non-pressurized cylindrical canister, wherein said canister has two ends, a first open end which connects to the system being charged and a second open end, and

wherein said first open end comprises a nozzle;

b) a predetermined amount of said fluid,

wherein said fluid is selected from the group consisting of a lubricant, a fluid dye for said air conditioning or refrigeration systems, and combinations thereof, and

wherein said fluid is maintained in said canister at about ambient pressure; and

c) a piston sealably disposed with said second open end of said canister,

wherein said canister is adapted to sealably and releasably connect to said pressurized air conditioning or refrigeration system via fluidly coupling means to form a closed binary system,

wherein said fluidly coupling means is a connector assembly having a first end connected to said nozzle of said canister and a second end connected to a service valve of the pressurized system,

wherein said connector assembly comprises:

- i) a flexible conduit,
 - ii) a thread on a first end of said flexible conduit, to engage with said nozzle of said canister,
- and

iii) a release valve on a second end of said flexible conduit, to engage with the service valve of the pressurized system, and

wherein said connector assembly further comprises a valve at one end of said flexible conduit, which prevents any material from back flushing into and contaminating said fluid in said canister.

14. The canister of claim 13, wherein said canister is fabricated out of transparent material and includes a plurality of gradient markings; and

wherein said nozzle is threaded.

15. The canister of claim 14, wherein said first open end comprises a threaded cap for engagement with said threaded nozzle.

16. The canister of claim 13, wherein said piston further comprises an O-ring.

17. The canister of claim 13, wherein said piston further comprises a recessed double O-ring.--

REMARKS

By this Preliminary Amendment, the specification has been amended, claims 1-12 have been canceled, and new claims 13-17 have been added.

More specifically, the specification has been updated to show the prosecution history of the parent patent applications. A replacement page with the replacement paragraph is attached hereto.

Claims 1-12 have been canceled and replaced with new claims 13-17. The new claims correspond to issued claims 1-5 in parent U.S. Patent 6,186,197. The expression "wherein said fluid is selected from the group consisting of a lubricant, a fluid dye for said air conditioning or refrigeration systems, and combinations thereof" has been added to new claim 1 (step b). Specific support for this amendment can be found, for example, on page 3, lines 19-20. A clean copy of the new claims is included in the attached Appendix. Thus, no new matter has been added by these amendments.

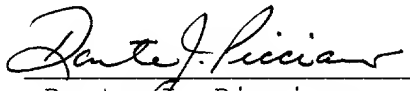
Early and favorable action on the merits are respectfully requested.

TRIGIANI--CONTINUATION OF U.S. PATENT APPLICATION 09/557,831

Should any matters remain in this application which might be resolved by interview, the Examiners is requested to telephone the undersigned at 570-386-5744.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

By: 
Dante J. Picciano
Reg. No. 33,543

BELL, BOYD & LLOYD LLC
P.O. Box 1135
Chicago, IL 60690-1135

APPARATUS FOR DETECTING LEAKS IN A PRESSURIZED AIR CONDITIONING OR REFRIGERATION SYSTEM

This application is a continuation of U.S. Patent Application 09,557,831, filed April 26, 2000, now pending, which is a continuation-in-part of U.S. Patent Application 09/535,368, filed March 24, 2000, now U.S. Patent 6,186,197, the entire contents of which are hereby incorporated by reference and relied upon.

BACKGROUND OF THE INVENTION

Field of the Invention

The instant invention relates generally to the field of pressurized fluid systems and more specifically it relates to an apparatus for detecting leaks in a pressurized air conditioning or refrigeration system. The purpose of the apparatus is to provide the technician with a simple method of injecting a predetermined amount of a secondary fluid, e.g., a fluorescent dye, and/or lubricant into a pressurized system.

Description of the Prior Art

Numerous pressurized fluid systems have been provided in the prior art that are adapted to operate optimally within a certain pressure range. If the internal pressure falls below this range, the system needs to be recharged with an appropriate lubricant. While these units may be suitable for the particular purpose to which they address, they would not be as suitable for the purposes of the present invention as heretofore described.

APPENDIX

13. A canister for charging a closed, pressurized air conditioning or refrigeration system with a fluid, comprising:

a) a closed, non-pressurized cylindrical canister,

wherein said canister has two ends, a first open end which connects to the system being charged and a second open end, and

wherein said first open end comprises a nozzle;

b) a predetermined amount of said fluid,

wherein said fluid is selected from the group consisting of a lubricant, a fluid dye for said air conditioning or refrigeration systems, and combinations thereof, and

wherein said fluid is maintained in said canister at about ambient pressure; and

c) a piston sealably disposed with said second open end of said canister,

wherein said canister is adapted to sealably and releasably connect to said pressurized air conditioning or refrigeration system via fluidly coupling means to form a closed binary system,

wherein said fluidly coupling means is a connector assembly having a first end connected to said nozzle of said

canister and a second end connected to a service valve of the pressurized system,

wherein said connector assembly comprises:

- i) a flexible conduit,
- ii) a thread on a first end of said flexible conduit, to engage with said nozzle of said canister, and

- iii) a release valve on a second end of said flexible conduit, to engage with the service valve of the pressurized system, and

wherein said connector assembly further comprises a valve at one end of said flexible conduit, which prevents any material from back flushing into and contaminating said fluid in said canister.

14. The canister of claim 13, wherein said canister is fabricated out of transparent material and includes a plurality of gradient markings; and

wherein said nozzle is threaded.

15. The canister of claim 14, wherein said first open end comprises a threaded cap for engagement with said threaded nozzle.

16. The canister of claim 13, wherein said piston further comprises an O-ring.

17. The canister of claim 13, wherein said piston further comprises a recessed double O-ring.